

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of:

Shah, Baiju et al.

Examiner: Mary Da Zhi Wang Cheung

Application No.: 10/090,550

Group Art Unit: 3621

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For: CONTENT BANK FOR OBJECTS

**APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37**

Dear Sir:

Appellants submit this brief further to the Notice of Appeal and Pre Appeal Brief Request for Review filed February 16, 2007, and the Notice of Panel Decision from Pre Appeal Brief Review mailed March 28, 2007 in the above-identified application.

## **TABLE OF CONTENTS**

I.	Real Party in Interest.....	3
II.	Related Appeals and Interferences.....	4
III.	Status of Claims .....	5
IV.	Status of Amendments .....	6
V.	Summary of Claimed Subject Matter .....	7
VI.	Grounds of Rejection to be Reviewed on Appeal.....	14
	A.    BRIEF SUMMARY OF THE FERA REFERENCE.....	14
	B.    BRIEF SUMMARY OF THE GINTER REFERENCE .....	14
VII.	Argument .....	16
	A.    CLAIMS 1-3, 6 AND 43 .....	16
	1.    The cited references do not teach the claimed subject matter as alleged.....	16
	a.    “services” .....	16
	b.    “receiving . . . object-related information targeted to a service” / “sending object-related information to the service” .....	17
	c.    “digital identity instance corresponding to the object . . . acting as a proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance” / “service registry lists available services for the object based on the at least one service module associated with the digital identity”.....	18
	2.    A person having ordinary skill in the art would not be motivated to combine the references .....	19
	B.    CLAIMS 4, 5, 19, 20, 44 AND 50.....	20
	C.    CLAIMS 7 AND 45.....	21
	D.    CLAIMS 8, 9-12, 17, 21, 23, 46, 47, 49 AND 51 .....	22
	E.    CLAIMS 13-16 AND 48 .....	23
	F.    CLAIM 18.....	23
	G.    CLAIM 22.....	24
VIII.	Conclusion .....	25

**I. Real Party in Interest**

Accenture Global Services GmbH is the real party in interest in this appeal by virtue of an executed Assignment from the named Inventors of their entire interest to Accenture Global Services GmbH. The Assignment evincing such ownership interest was recorded on June 11, 2002, in the United States Patent and Trademark Office at Reel 012999, Frame 0116.

## **II. Related Appeals and Interferences**

To Appellants' knowledge, there are no related Appeals or Interferences filed, pending, or decided.

### **III. Status of Claims**

The originally filed Application contained claims 1-78. Claims 24-42 and 52-78 have been withdrawn. Claims 1, 8, 43 and 46 were amended during prosecution of the instant application. Claims 1-23 and 43-51 are rejected. No claims have been allowed and there are no objections to the claims. A copy of appealed claims 1-23 and 43-51 are attached at Appendix A. Of the pending, appealed claims, 1, 8, 43 and 46 are independent.

#### **IV. Status of Amendments**

A Pre Appeal Brief Request for Review was filed on February 16, 2007 in response to the Final Office Action mailed November 17, 2006 and Advisory Action mailed on February 5, 2007. No amendments were made to the claims subsequent to the Final Office Action. The claims listed in Appendix A reflect the claims as they stood at the time the Final Office Action was mailed.

## V. Summary of Claimed Subject Matter

The disclosure of the present invention generally describes processing of object-related information as performed, at least in part, by a “digital identity instance” corresponding to the object. (¶11) The digital identity instance acts as a proxy for the object (¶11) and is defined by instantiations of one or more service modules (¶36; “executable instructions for performing functions such as storing and processing information relating to objects”) associated with the digital identity instance. Furthermore, the available services listed in the service registry are based on the one or more service modules associated with the digital identity instance. (¶41) In this manner, the digital identity instance supports mediated interactions with the object (¶29, ¶84) through its ability, via the service modules, to “perform one or more specific functions on behalf of that object.” (¶36) Specific summaries of the claimed subject matter are set forth below.

Claim 1 concerns a method (FIG. 5), in a content bank system (204) comprising at least one digital identity instance (¶36; FIG. 3A, ¶50-¶58) representative of at least one object (¶29; 200, FIGs. 2 and 3), for adding object-related information (¶36, ¶64) to the content bank system. The object-related information, targeted to a service (¶36, ¶66), is received (502) from a source (¶11, ¶33, ¶59, ¶64) by the digital identity instance acting as proxy (¶10, ¶50) for the object and defined by instantiations (¶36) of at least one service module (310-324, ¶36) associated with the digital identity instance. A services registry (332; ¶41; Tables 1-3, first entries), associated with the digital identity instance and listing available services for the object based on the at least one service module associated with the digital identity instance, is used to determine (504) whether the service targeted by the object-related information exists. When the service targeted by the object-related information exists the object-related information is sent (510; ¶68) to the service,

and subsequently processed (512; ¶68, ¶11) by the service such that the object-related information is subsequently available via the content bank system.

Claim 2 states that the object-related information is received via at least one access mode of a multi-mode interface (¶65) available to the digital identity instance.

Claim 3 states that the at least one access mode comprises any of: a Simple Object Access Protocol-based access mode, a voice-based mode, a text-based access mode, and an Instant Messaging-based access mode (¶65).

Claim 4 states that the service registry determines location information regarding the service (¶41) and that the object-related information is sent to the service based on the location information (¶68).

Claim 5 states that the location information corresponds to another content bank system (¶68, ¶41).

Claim 6 states that the source of the object-related information is any of: the object, another content bank system, another object, a manufacturer of the object, an owner of the object, and a provider of service to the object (¶6, ¶32, ¶33, ¶59, ¶64).

Claim 7 states that the access rights of the source to provide the object-related information to the content bank system are verified (¶67).

Claim 8 concerns a method (FIG. 6), in a content bank system (204) comprising at least one digital identity instance (¶36; FIG. 3A, ¶50-¶58) representative of at least one object (¶29; 200, FIGs. 2 and 3), for providing object-related information (¶36, ¶64) to a third party (¶27, ¶69). The digital identity instance, acting as proxy (¶10, ¶50) for the object and defined by instantiations (¶36) of at least one service module (310-324, ¶36) and corresponding to the object, determines (602) that the object-related information should be provided to the third party.



A services registry (332; ¶41; Tables 1-3, first entries), associated with the digital identity instance and listing available services for the object based on the at least one service module associated with the digital identity instance, is used to determine (604) whether the service targeted by the object-related information exists. When the service associated with the object-related information exists, the object-related information is accessed (610) and sent (612) by the service to the third party.

Claim 9 states that determining the need to provide the object-related information to the third party further comprises receiving a request for the object-related information from the third party, wherein the request specifies the third party as the destination for the object-related information (¶69).

Claim 10 states that the third party is any of: the object, another content bank system, another object, a manufacturer of the object, an owner of the object, and a provider of service to the object (¶6, ¶32, ¶33, ¶59, ¶64).

Claim 11 states that the request is received from the third party via at least one access mode of a multi-mode interface available to the digital identity instance (¶65).

Claim 12 states that the at least one access mode comprises any of: a Simple Object Access Protocol-based access mode, a voice-based mode, a text-based access mode, and an Instant Messaging-based access mode (¶65).

Claim 13 states that determining the need to provide the object-related information to the third party further comprises receiving a request for the object-related information from another third party, wherein the request specifies the third party as the destination for the object-related information (¶69).

Claim 14 states that the third party or the other third party is any of: the object, another content bank system, another object, a manufacturer of the object, an owner of the object, and a provider of service to the object (§6, §32, §33, §59, §64).

Claim 15 states that the request is received from the other third party via at least one access mode of a multi-mode interface available to the digital identity instance (§65).

Claim 16 states that the at least one access mode comprises any of: a Simple Object Access Protocol-based access mode, a voice-based mode, a text-based access mode, and an Instant Messaging-based access mode (§65).

Claim 17 states that determining the need to provide the object-related information to the third party further comprises detecting a condition requiring the object-related information to be pushed to the third party (§69).

Claim 18 states that a subscription request for the object-related information is received by the digital identity instance from the third party, and that the object-related information is pushed to only those third parties that have submitted a subscription request (§69).

Claim 19 states that location information regarding the service is determined by the services registry (§41) and that the object-related information is accessed by the service based on the location information (§68).

Claim 20 states that the location information corresponds to another content bank system (§68, §41).

Claim 21 states that access rights of the third party to the object-related information are verified (§48, §70) and, when the third party possesses access rights to the object-related information, sent (612) to the third party.

Claim 22 states that, prior to sending the object-related information to the third party, the object-related information is processed into a form suitable for sending to the third party (§70).

Claim 23 states that the object-related information comprises a pointer to additional object-related information (§68).

Claim 43 concerns a content bank system (204; §30) comprising at least one digital identity (§36; FIG. 3A, §50-§58) instance representative of at least one object (§29; 200, FIGs. 2 and 3) and including at least one processor (142; §26) and memory (146; §26) coupled to the at least one processor. Using executable instructions (150, 152; §26) stored in the memory, the processor is operable to receive (502), by a digital identity instance corresponding to an object and from a source (§11, §33, §59, §64), object-related information (§36, §64) targeted to a service (§36, §66). The digital identity instance acts as proxy (§10, §50) for the object and is defined by instantiations (§36) of at least one service module (310-324, §36) associated with the digital identity instance. The processor is further operable to determine, via a services registry (332; §41; Tables 1-3, first entries) associated with the digital identity instance, whether the service targeted by the object-related information exists (504). The services registry lists available services for the object based on the at least one service module associated with the digital identity instance (§41). The processor is further operable to send (510; §68) the object-related information to the service when the service targeted by the object-related information exists, and subsequently process (512; §68, §11) the object-related information by the service such that the object-related information is subsequently available via the content bank system.

Claim 44 states that the processor is further operable to determine, via the services registry, location information regarding the service (§41) and send the object-related information to the service based on the location information (§68).

Claim 45 states that the processor is further operable to verify access rights of the source to provide the object-related information associated with the object to the content bank system (§67).

Claim 46 concerns a content bank system (204; §30) comprising at least one digital identity (§36; FIG. 3A, §50-§58) instance representative of at least one object (§29; 200, FIGs. 2 and 3) and including at least one processor (142; §26) and memory (146; §26) coupled to the at least one processor. Using executable instructions (150, 152; §26) stored in the memory, the processor is operable to determine (602), by a digital identity instance (§36; FIG. 3A, §50-§58) corresponding to the object, the need to provide the object-related information to the third party. The digital identity instance acts as proxy (§10, §50) for the object and is defined by instantiations (§36) of at least one service module (310-324, §36) associated with the digital identity instance. The processor is further operable to determine, via a services registry (332; §41; Tables 1-3, first entries) associated with the digital identity instance, whether the service targeted by the object-related information exists (604). When the service associated with the object-related information exists, the processor is further operable to access (610), by the service, the object-related information and send (612), by the service, the object-related information to the third party.

Claim 47 states that the processor is further operable to receive a request for the object-related information from the third party, wherein the request specifies the third party as the destination for the object-related information (§69).

Claim 48 states that the processor is further operable to receive a request for the object-related information from another third party, wherein the request specifies the third party as the destination for the object-related information (§69).

Claim 49 states that the processor is further operable to detect a condition requiring the object-related information to be pushed to the third party (§69).

Claim 50 states that the processor is further operable to determine, via the services registry, location information regarding the service (§41) and to access the object-related information via the service based on the location information (§68).

Finally, claim 51 states that the processor is further operable to verify access rights of the third party to the object-related information (§48, §70) and send the additional object-related information to the third party when the third party possesses access rights to the object-related information (612).

## **VI. Grounds of Rejection to be Reviewed on Appeal**

Claims 1-23 and 43-51 stand rejected under 35 U.S.C. § 103(a) as being unpatentable given Fera (International Published Patent Application No. WO 01/015001) in view of Ginter et al (U.S. Patent No. 5,892,900; hereinafter “Ginter”).

### **A. BRIEF SUMMARY OF THE FERA REFERENCE**

The Fera reference is directed to an apparatus and method for managing a fleet of mobile assets such as trains or other vehicles. (Abstract) Fera describes a system that utilizes, for example, locomotive fault detection sensors that are onboard the locomotive and a communication system that allows the downloading of the fault information from the sensors through a data link to a data center. (page 5, line 6 – page 6, line 9) Notably, the data received from the sensors is sent directly to and stored in a database residing in a data center. (page 5, lines 16-19, 24-25) A web based system utilizes multiple web pages that are updated to reflect the performance reports, operating statistics of the locomotive, current location map for the fleet of mobile assets, and other information stored in the database. (FIG. 2, blocks 39, 48 & 56) Based on analysis of the information thus stored (FIG. 2, blocks 48 & 58), the web interface may also include service (i.e., maintenance) recommendations 60. (page 8, lines 6-8) In this regard, it is noted that the “services” referred to by Fera concern services that are performed on the mobile asset, e.g., maintenance or repair operations. (page 3, lines 17-19) Additionally, the web interface may also provide “information regarding services that are available 64 . . . that may be important to any decision regarding a maintenance recommendation 60.” (page 8, lines 17-19)

### **B. BRIEF SUMMARY OF THE GINTER REFERENCE**

The Ginter reference, in relevant part, concerns the provision of a “virtual distribution environment” (VDE) that may be used to distribute electronic content in a secure and reliable

manner. (col. 2, lines 19-32) To this end, Ginter provides detailed recitation of the structure and function of “nodes”, i.e., electronic appliances such as computers, that give rise to a “general purpose, configurable, transaction control/rights protection solution for users of computers, other electronic appliances, networks, and the information highway.” (col. 2, lines 29-32) As best illustrated in FIG. 8 of Ginter, each “electronic appliance” is provided with a “Rights Operating System” (ROS; col. 63, lines 28-34) that, much like a typical computer operating system, provides “basic functions” related to the “VDE information security control information, components and protocols” that hide the complexities and implementation differences of the underlying hardware platform. (col. 80, lines 10-21) Operating as a distributed processing environment (col. 83, line 38), ROS implements “services” that are linked together using a “remote procedure call” (RPC) request structure between different entities. (col. 83, lines 21-25) In this manner, ROS can create “component assemblies” or applications that draw upon “structures” provided by different entities within the system. (col. 91, lines 26-67) More specifically, ROS uses a number of defined “elements” to assemble such component assemblies (col. 92, line 63 – col. 93, line 4) including “load modules”, which constitute “basic instructions” for operating the electronic appliance (col. 93, lines 18-23; col. 94, lines 12-36).

## VII. Argument

A claim is obvious under the Patent Act “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a) (2004) “To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” (M.P.E.P. § 2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). “Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so.” (M.P.E.P. § 2143.01(I), citing *In re Kahn*, 441 F.3d 977, 986, 78 USPQ2d 1329, 1335 (Fed. Cir. 2006))

### A. CLAIMS 1-3, 6 AND 43

#### 1. The cited references do not teach the claimed subject matter as alleged

##### a. “services”

Referring, for example, to the instant rejection of claim 1, it is asserted that Fera teaches receiving, by a digital identity instance representative of an object, object related information (ORI) targeted to *a service* to the extent that Fera teaches the monitoring of sensors on objects (e.g., locomotives) and the provision of such sensor data to a centralized data base 39, citing page 5, lines 9-21 and page 8, lines 4-10. As noted above, services in the context of the instant disclosure (see ¶36) are defined to be functions, such as storing and processing information relating to objects, that are performed on behalf of an object. However, review of the cited portions of Fera reveal that, contrary to the assertion otherwise, the ORI provided to Fera’s centralized data base is not targeted to a service, i.e., a function performed on behalf of an object,



because the “service” taught by Fera is unrelated to the presently-claimed services and, in any event, the ORI taught by Fera is not, in fact, targeted to any kind of service.

The “service” taught by Fera is a “maintenance service” provided by a “service center” (page 8, lines 16-22), i.e., services that can be performed *on the object* as opposed to services, as presently defined, that can be performed *on behalf of the object*. “Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim.” (M.P.E.P. § 2111.01(IV), citing *Toro Co. v. White Consolidated Industries Inc.*, 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999)) Given this, Applicants respectfully submit that Fera fails as a basis for establishing prima facie obviousness to the extent that it fails to teach or suggest “services” encompassed by the instant disclosure. Applicant further notes that no teachings in the Ginter reference have been cited as teaching the claimed “services”, which reference thus fails to remedy the deficiency of Fera.

**b. “receiving . . . object-related information targeted to a service” /  
“sending object-related information to the service”**

Unlike the instant claims, Fera fails to teach or suggest receiving ORI that is targeted to a service and sending the ORI to a service. With regard to “receiving . . . object-related information targeted to a service”, Applicants note that, as described above, the “service” taught by Fera is limited to a maintenance service performed on the object by a service center. Nevertheless, page 5, lines 9-21 and page 8, lines 4-10 have been cited as teaching the reception of ORI “targeted to a service.” However, inspection of the cited portions reveals that, with regard to the former, Fera simply teaches that objects may be assigned unique identifiers and that sensor data provided by an object (akin to the presently-claimed ORI) may be provided to a centralized database. With regard to the latter, Fera teaches that faults or anomalies identified through the received sensor data (see also FIG. 2, blocks 39, 48, 58 & 60) may be used to

develop a service recommendation, and the fault/anomalies uploaded to suitable web page. Thus, Fera is seen to teach receiving ORI targeted to a database, not a service (as the term “service” is used in either the instant disclosure *or* Fera). Even if one were to interpret Fera’s “service” as being equivalent to the services taught by the present disclosure, the cited portions of Fera clearly demonstrate that Fera’s ORI is not, in fact, sent to a “service”, but is instead provided to a database. At most, the only thing sent to Fera’s “service” is the fault/anomaly identified based on analysis of ORI previously provided to the database. (FIG. 5, blocks 128, 134 & 135; page 13, lines 1-9; page 13, line 23 – page 14, line 11) In a nutshell, the ORI of Fera is not specifically targeted to any service, but instead involves a “service” only after analysis reveals the existence of a fault within the object performance.

It is further asserted (claim 1 rejection) that Fera teaches “sending the object-related information to the service” at page 14, lines 3-11 and FIG. 5. As noted above, however, review of the cited portions of Fera demonstrate that ORI is never sent to the “service”, but rather a “fault” based on an analysis of the ORI, is provided to the “service.” Thus, to the extent that Fera fails to teach receiving ORI targeted to a service and sending ORI to the service, Applicants respectfully submit that Fera is an inadequate basis for establishing the prima facie obviousness of claim 1, which claim is therefore in condition for allowance.

**c. “digital identity instance corresponding to the object . . . acting as a proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance” / “service registry lists available services for the object based on the at least one service module associated with the digital identity”**

Further still, Examiner has correctly noted that Fera fails to teach the digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance or a services registry that lists available services for the object based on the at least one service module associated with the digital

identity instance. Given this, Ginter has been cited as teaching these limitations. Applicants respectfully submit that Ginter does not teach these limitations.

As noted above, the “service modules” of Ginter are akin, if not essentially identical to, the services typically provided by a computer’s operating system. It is further noted that Ginter is wholly unrelated to and silent on the topic of processing of object related information. Thus, while Ginter’s “service modules” may be used to create “component assemblies” for performing useful functions such as establishment of agreements between parties (col. 91, lines 26-56), Ginter fails to teach that any collective instantiation of such “service modules” may act as a proxy for an object. Thus, to the extent that Ginter also fails to teach the limitations not taught by Fera, Applicants respectfully submit that the combination of Fera in view of Ginter fails to establish prima facie obviousness of the claims.

2. A person having ordinary skill in the art would not be motivated to combine the references

Assuming for the sake of argument that Ginter does in fact teach a digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance or a services registry that lists available services for the object based on the at least one service module associated with the digital identity instance, Applicants respectfully submit that a person having ordinary skill in the art would not be motivated to combine the Fera and Ginter references because the “services” of Fera and Ginter are wholly unrelated to each other. As noted above, the “service modules” taught by Ginter are executable code or instructions that relate to basic functions for controlling operation of Ginter’s electronic appliances. Ginter is wholly unrelated to and silent on the topic of the processing of object related information, much less the use of digital identity instances (defined by instantiations of one or more service modules) as proxies for objects. In contrast, the

“services” provided by Fera are unrelated to functions performed *on behalf of an object* (i.e., in a proxy fashion, as presently claimed), but instead relate to operations that may be performed *on the object*, i.e., maintenance functions.

One of ordinary skill in the art would not be motivated (as asserted in the rejection of claim 1) to “allow the digital identity instance in Fera’s teaching to include [Ginter’s] service modules for performing services accordingly as taught by Ginter for easy execution of [Ginter’s executable instructions]” because the operating system-like basic functions of Ginter are no more related to the provision of services that could be performed on an object than the typical “services” provided by a computer’s operating system. That is, one would not be motivated to combine Ginter’s service modules because they are unrelated to the “services” provided by Fera and would not further the provision of services to, much less on behalf of, an object. Of equal significance, the motivation to combine the references as suggested by Examiner is undermined by the principle that “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” (M.P.E.P. § 2143.01(VI), citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)) In this instance, the software-based service modules of Ginter are wholly different in form and substance from the “services” taught by Fera, and incorporation of Ginter’s service modules into Fera would require a complete revision of the meaning of “services” as taught by Fera. For these reasons, Applicants respectfully submit that the cited combination of Fera in view of Ginter is faulty to the extent that one of ordinary skill in the art would not be motivated to combine the references.

B. CLAIMS 4, 5, 19, 20, 44 AND 50

With regard to, for example, instant claims 4 and 5, Examiner asserts that Fera teaches determining location information regarding the service and sending ORI to the service based on

the location information (claim 4), which location information may correspond to another content bank system (claim 5). To this end, page 14, lines 3-11 and FIG. 5 of Fera have been cited. However, as noted above, the cited portions fail to teach sending ORI to a service, much less doing so based on location of the service or where the location of the service corresponds to another content bank system. At most, the cited portions of Fera describe how a “human operator” may be instructed regarding the “optimal repair facility” where such instruction is based, in part, upon “proximity” of the object to the facility. Obviously, such a teaching does not concern sending ORI to a service, but instead informing a user where to send a physical object to obtain repairs. For this reason, Applicants respectfully submit that the cited combination of Fera in view of Ginter fails to establish prima facie obviousness of the claims.

Finally, Applicants note that claims 4, 5, 19, 20, 44 and 50 are dependent claims. Thus, the arguments separately presented herein with respect to those claims from which claims 4, 5, 19, 20, 44 and 50 depend apply equally hereto and are incorporated by this reference.

#### C. CLAIMS 7 AND 45

With regard to instant claims 7 and 45, Examiner asserts that Fera recites verifying access rights of the source to provide the ORI to the content bank system, citing page 10, lines 1-15 of Fera. However, the cited portion of Fera does not teach that the access rights of the *source of the ORI* are verified, as presently claimed, but rather that the rights of entities seeking to *access the stored ORI* are verified. (page 10, lines 1-6) In short, Fera teaches restriction on those entities that can access stored ORI, whereas the claims recite restrictions on those entities that can store ORI in the first instance. Applicants note the further teachings of Fera, at page 10, lines 6-8 concerning restrictions on user-provided information to a web page. However, neither this teaching, nor the web pages illustrated in Fera’s FIGs. 10-12 (and associated description at page 19, line 18 – page 20, 11) teach or suggest what such user-provided information might be (other,

perhaps, than hyperlink selections or search queries; see FIGs. 10 and 12) and, in any event, do not teach or suggest that such user-provided information is analogous or otherwise equivalent to ORI. For this reason, Applicants respectfully submit that the cited combination of Fera in view of Ginter fails to establish prima facie obviousness of the claims.

Finally, Applicants note that claims 7 and 45 are dependent claims. Thus, the arguments separately presented herein with respect to those claims from which claims 7 and 45 depend apply equally hereto and are incorporated by this reference.

D. CLAIMS 8, 9-12, 17, 21, 23, 46, 47, 49 AND 51

With regard to, for example, independent claims 8 and 46, Applicants first note that the arguments presented above regarding claims 1-3, 6 and 43 and the shortcomings of Fera in view of Ginter apply equally to these claims to the extent that they recite substantially identical limitations.

Furthermore, Applicants dispute the assertion that Fera teaches a service providing ORI to a third party, as claimed. Indeed, to the extent that the “service” taught by Fera concerns operations that may be performed on an object, rather than on its behalf, it is clear that the “service” of Fera does not provide object related information to anyone. The cited portion of Fera (page 14, lines 3-22 and FIG. 5) does not teach ORI itself being provided to a third party by the service, but rather that information far-removed from the ORI (i.e., suggested responses to fault information that is itself developed by analysis of ORI, as noted above) may be provided to an operator of Fera’s system, and that data concerning cargo in “mobile assets” may be processed to develop information that is distributed via a network, rather than a “service”. For these reasons, Applicants respectfully submit that the combination of Fera in view of Ginter fails to establish prima facie obviousness of the claims.

E. CLAIMS 13-16 AND 48

With regard to, for example, claim 13 and 48, it is asserted that Fera teaches (FIG. 9) receiving a request for ORI from one third party in which the request specifies that a second third party (i.e., other than the requesting party) as the destination of the ORI. However, Applicants respectfully submit that Fera teaches no such thing. FIG. 9, as shown and described on page 19, lines 1-7, concerns a web page used by Fera's service personnel to identify proximity of a train to a service shop. While the web page illustrated in Fera's FIG. 9 does appear to provide location information to the user requesting such information via the web page, there is simply no teaching or suggesting that such information may be provided to *another* "third party", e.g., another user or similar entity, at the behest of the requesting user. For this reason, Applicants respectfully submit that the combination of Fera in view of Ginter fails to establish prima facie obviousness of the claims.

Finally, Applicants note that claims 13-16 and 48 are dependent claims. Thus, the arguments separately presented herein with respect to those claims from which claims 13-16 and 48 depend apply equally hereto and are incorporated by this reference.

F. CLAIM 18

With regard to claim 18, Applicants note the recitation of receiving a subscription request from a third party for ORI, wherein ORI is pushed only to those third parties that have submitted such a subscription request. Applicants further note that the rejection of claim 18 fails to make any mention of any teaching in either of the Fera or Ginter references concerning such subscription requests, nor the pushing of ORI to only those third parties that submitted such requests. As no showing of this limitation has been made, Applicants respectfully submit that the combination of Fera in view of Ginter fails to establish prima facie obviousness of the claim.

Finally, Applicants note that claim 18 is a dependent claim. Thus, the arguments separately presented herein with respect to that claim from which claim 18 depends apply equally hereto and are incorporated by this reference.

G. CLAIM 22

With regard to claim 22, Applicants note the recitation of processing ORI into a form suitable for sending the ORI to a third party. In the rejection, page 14, lines 3-11 and FIG. 5 of Fera are cited as teaching this limitation. However, as noted above, this portion of Fera is silent with regard to sending ORI to a third party, much less transforming such ORI prior to sending it. Indeed, the cited portion is completely silent with regard to any type of transformation. For this reason, Applicants respectfully submit that the combination of Fera in view of Ginter fails to establish *prima facie* obviousness of the claim.

Finally, Applicants note that claim 22 is a dependent claim. Thus, the arguments separately presented herein with respect to that claim from which claim 22 depends apply equally hereto and are incorporated by this reference.




### VIII. Conclusion

For the reasons advanced above, Appellants submit that the Examiner erred in rejecting pending claims 1-23 and 43-51 and respectfully request reversal of the decision of the Examiner.

Respectfully submitted,

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## APPENDIX A

### CLAIMS ON APPEAL

1. In a content bank system comprising at least one digital identity instance representative of at least one object, a method for adding object-related information regarding an object of the at least one object to the content bank system, the method comprising:

receiving, from a source by a digital identity instance corresponding to the object, the object-related information targeted to a service, the digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance;

determining, via a services registry associated with the digital identity instance, whether the service targeted by the object-related information exists, wherein the services registry lists available services for the object based on the at least one service module associated with the digital identity instance;

when the service targeted by the object-related information exists, sending the object-related information to the service; and

processing the object-related information by the service such that the object-related information is subsequently available via the content bank system.

2. The method of claim 1, wherein the object-related information is received via at least one access mode of a multi-mode interface available to the digital identity instance.

3. The method of claim 2, wherein the at least one access mode comprises any of: a Simple Object Access Protocol-based access mode, a voice-based mode, a text-based access mode, and an Instant Messaging-based access mode.

## APPENDIX A

4. The method of claim 1, further comprising:  
determining, via the services registry, location information regarding the service; and  
sending the object-related information to the service based on the location information.
5. The method of claim 4, wherein the location information corresponds to another content bank system.
6. The method of claim 1, wherein the source of the object-related information is any of: the object, another content bank system, another object, a manufacturer of the object, an owner of the object, and a provider of service to the object.
7. The method of claim 1, further comprising:  
verifying access rights of the source to provide the object-related information associated with the object to the content bank system.
8. In a content bank system comprising at least one digital identity instance representative of at least one object, a method for providing object-related information regarding an object of the at least one object to a third party, the method comprising:  
determining, by a digital identity instance corresponding to the object, the object-related information should be provided to the third party, the digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance;

## APPENDIX A

determining, via a services registry associated with the digital identity instance, whether a service associated with the object-related information exists, wherein the services registry lists available services for the object based on the at least one service module associated with the digital identity instance;

when the service associated with the object-related information exists, accessing the object-related information via the service; and

sending, by the service, the object-related information to the third party.

9. The method of claim 8, wherein determining the need to provide the object-related information to the third party further comprises receiving a request for the object-related information from the third party, wherein the request specifies the third party as the destination for the object-related information.

10. The method of claim 9, wherein the third party is any of: the object, another content bank system, another object, a manufacturer of the object, an owner of the object, and a provider of service to the object.

11. The method of claim 9, wherein the request is received from the third party via at least one access mode of a multi-mode interface available to the digital identity instance.

12. The method of claim 11, wherein the at least one access mode comprises any of: a Simple Object Access Protocol-based access mode, a voice-based mode, a text-based access mode, and an Instant Messaging-based access mode.

## APPENDIX A

13. The method of claim 8, wherein determining the need to provide the object-related information to the third party further comprises receiving a request for the object-related information from another third party, wherein the request specifies the third party as the destination for the object-related information.

14. The method of claim 13, wherein the third party or the other third party is any of: the object, another content bank system, another object, a manufacturer of the object, an owner of the object, and a provider of service to the object.

15. The method of claim 13, wherein the request is received from the other third party via at least one access mode of a multi-mode interface available to the digital identity instance.

16. The method of claim 15, wherein the at least one access mode comprises any of: a Simple Object Access Protocol-based access mode, a voice-based mode, a text-based access mode, and an Instant Messaging-based access mode.

17. The method of claim 8, wherein determining the need to provide the object-related information to the third party further comprises detecting a condition requiring the object-related information to be pushed to the third party.

18. The method of claim 17, further comprising:

## APPENDIX A

receiving, by the digital identity instance from the third party, a subscription request for the object-related information,

wherein the object-related information is pushed to only those third parties that have submitted a subscription request.

19. The method of claim 8, further comprising:

determining, via the services registry, location information regarding the service; and  
accessing the object-related information via the service based on the location information.

20. The method of claim 19, wherein the location information corresponds to another content bank system.

21. The method of claim 8, further comprising:

verifying access rights of the third party to the object-related information; and  
sending the additional object-related information to the third party when the third party possesses access rights to the object-related information.

22. The method of claim 8, further comprising:

prior to sending the object-related information to the third party, processing the object-related information into a form suitable for sending the object-related information to the third party.

## APPENDIX A

23. The method of claim 8, wherein the object-related information comprises a pointer to additional object-related information.

43. A content bank system comprising at least one digital identity instance representative of at least one object device, the system comprising:

at least one processor; and

memory, coupled to the at least one processor, comprising executable instructions that, when executed by the at least one processor, cause the at least one processor to:

receive, from a source by a digital identity instance corresponding to an object, object-related information targeted to a service, the digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance;

determine, via a services registry associated with the digital identity instance, whether the service targeted by the object-related information exists, wherein the services registry lists available services for the object based on the at least one service module associated with the digital identity instance;

send the object-related information to the service when the service targeted by the object-related information exists; and

process the object-related information by the service such that the object-related information is subsequently available via the content bank system.

## APPENDIX A

44. The system of claim 43, wherein the memory further comprises computer-executable instructions that, when executed by the at least one processor, cause the at least one processor to:

determine, via the services registry, location information regarding the service; and  
send the object-related information to the service based on the location information.

45. The system of claim 43, wherein the memory further comprises computer-executable instructions that, when executed by the at least one processor, cause the at least one processor to:

verify access rights of the source to provide the object-related information associated with the object to the content bank system.

46. A content bank system comprising at least one digital identity instance representative of at least one object device, the system comprising:

at least one processor; and

memory, coupled to the at least one processor, comprising executable instructions that, when executed by the at least one processor, cause the at least one processor to:

determine, by a digital identity instance corresponding to the object, the need to provide the object-related information to the third party, the digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance;

determine, via a services registry associated with the digital identity instance, whether a service associated with the object-related information exists, wherein the services registry lists

## APPENDIX A



available services for the object based on the at least one service module associated with the digital identity instance;

when the service associated with the object-related information exists, access the object-related information via the service; and

send, by the service, the object-related information to the third party.

47. The system of claim 46, wherein the memory further comprises computer-executable instructions that, when executed by the at least one processor, cause the at least one processor to:

receive a request for the object-related information from the third party, wherein the request specifies the third party as the destination for the object-related information.

48. The system of claim 46, wherein the memory further comprises computer-executable instructions that, when executed by the at least one processor, cause the at least one processor to:

receive a request for the object-related information from another third party, wherein the request specifies the third party as the destination for the object-related information.

49. The system of claim 46, wherein the memory further comprises computer-executable instructions that, when executed by the at least one processor, cause the at least one processor to:

detect a condition requiring the object-related information to be pushed to the third party.

## APPENDIX A

50. The system of claim 46, wherein the memory further comprises computer-executable instructions that, when executed by the at least one processor, cause the at least one processor to:

determine, via the services registry, location information regarding the service; and  
access the object-related information via the service based on the location information.

51. The system of claim 46, wherein the memory further comprises computer-executable instructions that, when executed by the at least one processor, cause the at least one processor to:

verify access rights of the third party to the object-related information; and  
send the additional object-related information to the third party when the third party possesses access rights to the object-related information.

## EVIDENCE APPENDIX

[NONE]

## APPENDIX B

## RELATED PROCEEDINGS

[NONE]

## APPENDIX C